

C. DUKES SCOTT  
EXECUTIVE DIRECTOR

P.O. Box 11263  
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DAN E ARNETT  
CHIEF OF STAFF

March 23, 2005

Mr. Charles L.A. Terreni  
Chief Clerk/Administrator  
South Carolina Public Service Commission  
101 Executive Center Dr., Suite 100  
Columbia, SC 29210

RECEIVED  
2005 MAR 23 PM 4:53  
SC PUBLIC SERVICE  
COMMISSION

Re: South Carolina Electric & Gas Company – Annual Review  
Docket No. 2005-2-E

Dear Charles:

Enclosed for filing please find the original and twenty-six (26) copies of the Direct Testimony of A.R. Watts and Jacqueline R. Cherry in the above referenced matter. Please date stamp the extra copies enclosed and return it to me via our courier.

Also, we have served same on all parties of record and enclose a Certificate of Service to that effect.

Please let me know if you have any questions.

Sincerely,

*Shannon Hudson*

Shannon B. Hudson

SBH/cc

Enclosures

cc: Mitchell Willoughby, Esquire  
John F. Beach, Esquire  
Scott Elliott, Esquire  
Damon E. Xenopoulos, Esquire

**THE OFFICE OF REGULATORY STAFF**  
**DIRECT TESTIMONY AND EXHIBITS**  
**OF**  
**A.R. WATTS**



RECEIVED DATE: OK D Decker  
SERVICE: OK D Decker

**DOCKET NO. 2005-2-E**  
**South Carolina Electric & Gas Company**  
**Annual Review**

**DIRECT TESTIMONY OF  
A.R. WATTS  
ON BEHALF OF  
THE SOUTH CAROLINA OFFICE OF REGULATORY STAFF  
DOCKET NO. 2005-2-E**

**Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND  
OCCUPATION.**

**A.** My name is A.R. "Randy" Watts. My business address is 1441 Main Street, Suite 300, Columbia, South Carolina 29201. I am employed by the State of South Carolina as Program Manager in the Electric Department for the Office of Regulatory Staff ("ORS").

**Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND  
EXPERIENCE.**

**A.** I received a Bachelor of Science Degree in Electrical Engineering from the University of South Carolina in Columbia in 1976. I was employed at that time by the Public Service Commission of South Carolina ("Commission") as a Utilities Engineer in the Electric Department and was promoted to Chief of the Electric Department in August 1981. Subsequent to internal Commission restructuring, my position was redesignated Chief of Electric in October 1999. I remained in that role until transferring to my current position with ORS in January 2005. I have testified on numerous occasions before the Commission in conjunction with fuel clause, complaint, territorial assignment, Siting Act and general rate proceedings.

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**THE OFFICE OF REGULATORY STAFF  
1441 Main Street, Suite 300  
Post Office Box 11263 (29211)  
Columbia, SC 29201**

1 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**  
2 **PROCEEDING?**

3 **A.** The purpose of my testimony is to set forth ORS findings and  
4 recommendations resulting from our examination of South Carolina Electric &  
5 Gas Company's ("Company") fuel expenses and power plant operations used in  
6 the generation of electricity to meet customer requirements.

7 **Q. WHAT AREAS WERE ENCOMPASSED IN YOUR REVIEW OF THE**  
8 **COMPANY'S FUEL EXPENSES?**

9 **A.** First, ORS reviewed the Company's responses to our Data Requests (Sets  
10 No. 1 and No. 2) which encompassed approximately forty-eight questions. In  
11 preparation for this proceeding ORS reviewed the Company's monthly fuel  
12 reports including power plant performance data, major unit outages and  
13 generation statistics. Comparisons and analyses of actual to original estimates  
14 were performed for both megawatt hour sales and fuel costs. ORS analyzed the  
15 Company's fuel cost projections and reviewed the Adjustment for Fuel Costs  
16 Tariff.

17 **Q. WHAT ADDITIONAL STEPS WERE TAKEN IN ORS'S REVIEW OF**  
18 **THE COMPANY'S REQUEST IN THIS PROCEEDING?**

19 **A.** In addition, ORS met with various representatives of the Company  
20 including members of the Fuel Procurement Department, Engineering Operations  
21 Management, and the Resource Planning Department to discuss the Company's  
22 procurement procedures, operations plans, and forecasting methodologies. ORS

1 also visited one of the Company's major coal-fired steam plants to view  
2 maintenance work in progress.

3 A review of filings by other southeastern utilities with similar purchasing  
4 and transportation needs was performed regarding their fuel costs. On a daily  
5 basis, ORS keeps abreast of the coal industry through industry and governmental  
6 publications regarding activity in the coal markets.

7 **Q. DID ORS EXAMINE THE COMPANY'S PLANT OPERATIONS FOR**  
8 **THE REVIEW PERIOD?**

9 **A.** Yes. ORS reviewed the Company's operation of its generating facilities,  
10 including special attention to the nuclear plant operations to determine if the  
11 Company made reasonable efforts to minimize fuel costs. As shown by Exhibit  
12 ARW-1, ORS reviewed the availability of the Company's major power plants.  
13 Page one of Exhibit ARW-1 shows the monthly availability of the Company's  
14 generating units stated in percentages. The capacity factors on page two of  
15 Exhibit ARW-1 indicate the monthly utilization of each unit in producing power.

16 **Q. PLEASE EXPLAIN HOW ZERO AVAILABILITY IS REPRESENTED ON**  
17 **YOUR EXHIBIT ARW-2.**

18 **A.** Exhibit ARW-2 shows the Fossil and Nuclear Unit Outage Report for the  
19 Company. Locations with zero availability as well as those locations having  
20 months with less than 100% availability led us to investigate reasons for such  
21 occurrences. As shown on Exhibit ARW-2, ORS obtained Company outage  
22 reports explaining the various reasons for the unavailability or outages. As an  
23 example, Exhibit ARW-1 shows McMeekin had zero availability in October

1        2004. Exhibit ARW-2 explains the reason for the zero availability in October  
2        2004. McMeekin No. 1 had an outage between September 24, 2004 and  
3        November 21, 2004 which was the period during which the installation of the  
4        over-fired air system occurred.

5        **Q.    WOULD YOU EXPLAIN THE OTHER OUTAGES AS OUTLINED ON**  
6        **EXHIBIT ARW-2?**

7        **A.**        Yes. These indicate major unit outages in excess of 100 hours or greater  
8        during the review period. Although not included in this Exhibit, outages less than  
9        100 hours were found to be reasonable by ORS.

10       **Q.    PLEASE ADDRESS THE OUTAGES AT VC SUMMER NUCLEAR**  
11       **STATION.**

12       **A.**        Exhibit ARW-2 page two shows two forced outages experienced during  
13       the review period. The first occurred between March 30, 2004 and April 11, 2004  
14       and the second occurred between December 6, 2004 and December 9, 2004.  
15       ORS found that the Company took appropriate corrective action with respect to  
16       these outages, and there were no "NRC" fines associated with either of these  
17       outages.

18       **Q.    WHAT WERE THE RESULTS OF YOUR ANALYSIS OF THE**  
19       **COMPANY'S PLANT OPERATIONS FOR THE PERIOD UNDER**  
20       **REVIEW?**

21       **A.**        ORS's review of the Company's operation of its generating facilities  
22       resulted in a finding that the Company made reasonable efforts to maximize unit  
23       availability and minimize fuel costs.

1 **Q. DID ORS REVIEW THE GENERATION MIX UTILIZED BY THE**  
2 **COMPANY DURING THE REVIEW PERIOD?**

3 **A.** Yes. Exhibit ARW-3 shows the generation mix for the review period by  
4 generation type. As shown in this exhibit, the higher cost combined-cycle plants,  
5 which include both Urquhart and Jasper, contributed higher percentage generation  
6 during the summer or peak months and lower percentage generation during the  
7 non-summer period.

8 **Q. WHY DID YOU REFER TO THE COMBINED CYCLE PLANTS AS**  
9 **HAVING HIGHER COSTS?**

10 **A.** Exhibit ARW-4 shows the average fuel costs by major generating plants  
11 on the Company system for the review period and the megawatt hours produced  
12 by those respective plants. The chart shows the lowest average fuel costs for VC  
13 Summer Nuclear Station being 0.50 cents/kwh and the highest average fuel costs  
14 for the Jasper combined cycle plant being 5.23 cents/kwh. The Company utilizes  
15 economic dispatch which generally tends to follow the average fuel cost with the  
16 lower cost units being dispatched first.

17 **Q. HAS ORS REVIEWED THE ACCURACY OF THE COMPANY'S**  
18 **FORECAST?**

19 **A.** Yes. As shown in Exhibit ARW-5, the Company's actual sales versus  
20 forecasted sales varied by only 1.26% during the review period. In addition,  
21 Exhibit ARW-6 shows the monthly variance between projected and actual fuel  
22 cost factors, and provides the cumulative variance of 6.28%.

1 **Q. DID ORS REVIEW ADDITIONAL INFORMATION IN DETERMINING**  
2 **THE REASONABLENESS OF THE COMPANY'S FORECAST?**

3 **A.** Yes. ORS reviewed the forecasted maintenance schedules for the  
4 Company's major generating units as well as the Company's fuel price forecast  
5 for Nuclear, Coal, and Natural Gas. ORS also reviewed the PROSYM® computer  
6 model inputs and results utilized by the Company in projecting fuel costs.  
7 PROSYM® is a widely accepted computer model utilized by numerous utility  
8 companies throughout the country for fuel cost projections. Based on that review  
9 ORS believes the Company's forecast to be reasonable.

10 **Q. WHAT OTHER REVIEWS HAS ORS UTILIZED IN MAKING ITS**  
11 **DETERMINATIONS IN THIS PROCEEDING?**

12 **A.** Exhibit ARW-7 shows the ending balances of over and under collections  
13 of fuel costs beginning July 1979. The Company has experienced both over and  
14 under recovery balances throughout the approximately fifteen years.

15 **Q. WHAT OTHER SOURCES DOES ORS USE IN DETERMINING THE**  
16 **REASONABLENESS OF THE COMPANY'S REQUEST?**

17 **A.** ORS routinely 1) reviews private and public industry publications as well  
18 as those available on the Energy Information Administration's (EIA) website; 2)  
19 conducts meetings with Company personnel; 3) conducts meetings with  
20 representatives of large industrial users; 4) attends industry conferences; and 5)  
21 reviews fuel information as filed monthly by electric generating utilities on Form  
22 423 with the Federal Government. An example of EIA data reviewed is included  
23 on Exhibit ARW-8, which shows the upward trend, particularly for Central

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**THE OFFICE OF REGULATORY STAFF**

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1       Appalachia coal, of the average weekly coal commodity spot prices over the three  
2       year period ending March 11, 2005. South Carolina Electric & Gas Company  
3       generally obtains its coal from Central Appalachia supply.

4       **Q.   DOES ORS HAVE A RECOMMENDATION FOR THE FUEL**  
5       **COMPONENT IN THIS PROCEEDING?**

6       **A.**       Yes. ORS recommends the fuel component in this proceeding be set at  
7       2.256 cents/kwh for the period May 2005 through April 2006.

8       **Q.   PLEASE EXPLAIN THE BASIS FOR YOUR PROPOSED BASE FUEL**  
9       **LEVEL COMPONENT.**

10      **A.**       Our analysis indicates a major driver for the upward pressure on fuel costs  
11      is the significant increases in delivered cost of coal. In addition, with the  
12      increased utilization of the Company's combined-cycle units, the comparatively  
13      higher cost of natural gas is playing an increasing role in total fuel expenses.  
14      Exhibit ARW-9 shows the Company's projected average total cost of coal per ton  
15      for the calendar years 2005, 2006 and 2007. This Exhibit indicates a fairly level  
16      cost per ton for the first two years followed by higher anticipated costs in 2007 as  
17      old contracts expire and new contracts become effective. Exhibit ARW-10 shows  
18      the calculation of the 2.256 cents/kwh fuel base component. The Audit  
19      Department of ORS provided the under-recovered balance of \$37.949 million.

20      **Q.   DOES ORS HAVE ANY RECOMMENDATIONS REGARDING**  
21      **TREATMENT OF THIS LEVEL OF UNDER RECOVERY?**

22      **A.**       Yes. ORS recommends that an amount equal to the under recovery be  
23      levelized over a two year period. This recommendation is based on several

1 factors. As mentioned previously, the Company's projected total average coal  
2 costs for 2005 and 2006 are relatively level and then increase in 2007. The third  
3 year is accompanied by more uncertainty in the projections. ORS's  
4 recommendation will help stabilize the factor and tend to minimize fluctuations  
5 while affording the opportunity to review costs and operational data at succeeding  
6 fuel review proceedings.

7 While ORS recognizes that S.C. Code Ann. § 58-27-865(B) indicates that  
8 any under recovery should be recovered during the next twelve months, ORS also  
9 recognizes that the Commission previously allowed an amortization of an under  
10 recovery over a two year period. *See* Commission Order No. 2001-397 issued in  
11 Docket No. 2001-2-E, SCE&G – Annual Review of Base Rates for Fuel Costs. In  
12 addition, ORS is charged with the duty to represent the public interest of South  
13 Carolina pursuant to S.C. Code §58-4-10(B) (added by Act 175), and ORS  
14 believes such a two year levelizing period would serve the public interest. S.C.  
15 Code §58-4-10(B)(1) through (3) reads in part as follows:

16 "... 'public interest' means a balancing of the following:

- 17  
18 (1) concerns of the using and consuming public with respect to public  
19 utility services, regardless of the class of customer;  
20 (2) economic development and job attraction and retention in South  
21 Carolina; and  
22 (3) preservation of the financial integrity of the State's public utilities  
23 and continued investment in and maintenance of utility facilities so  
24 as to provide reliable and high quality utility services."  
25

26 This two year levelization period would balance concerns of the using public  
27 while preserving the financial integrity of the Company. ORS also believes a two  
28 year levelization period would not inhibit economic development.

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1           ORS also recommends that the first dollars recovered in the succeeding  
2           twelve months beginning May 2005 be applied to the under recovery so that in the  
3           next fuel proceeding for the Company any under recovery will be for the period  
4           May 2005 to May 2006. This will serve to protect the integrity of the statutory  
5           scheme as well as the financial integrity of the Company.

6           For the reasons set forth above, ORS recommends that an amount equal to  
7           the under recovery be levelized over a two year period.

8   **Q.   DOES THIS CONCLUDE YOUR TESTIMONY?**

9   **A.           Yes, it does.**

**SOUTH CAROLINA  
OFFICE OF REGULATORY STAFF**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
ANNUAL REVIEW OF BASE RATES FOR FUEL COST  
ACTUAL REVIEW PERIOD: MARCH 1, 2004 – JANUARY 31, 2005**

**DOCKET NO. 2005-2-E**

**A. RANDY WATTS TESTIMONY**

**EXHIBIT INDEX**

<b><u>EXHIBIT NO.</u></b>	<b><u>EXHIBIT TYPE</u></b>	<b><u>PREPARED BY</u></b>
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ARW-1	Power Plant Performance Data Report – Availability/Capacity Factors	ORS
ARW-2	Fossil/Nuclear Unit Outage Report (100 Hrs. or Greater Duration) for SCE&G	ORS
ARW-3	Generation Mix Report (March 2004 – January 2005) for SCE&G	ORS
ARW-4	Generation Statistics for Major Plants (March 2004 – January 2005) for SCE&G	ORS
ARW-5	SC Retail Comparison of Estimated to Actual Energy Sales for SCE&G	ORS
ARW-6	SC Retail Comparison of Estimated to Actual Fuel Cost for SCE&G	ORS
ARW-7	History of Cumulative Recovery Account Report for SCE&G	ORS
ARW-8	Average Weekly Coal Commodity Spot Prices	Platts Coal Outlook (From EIA website)
ARW-9	SCE&G Forecasted Coal Costs	ORS
ARW-10	Base Fuel Rate Projected Period: May 2005-April 2006 for SCE&G	ORS

**Office of Regulatory Staff**  
**Power Plant Performance Data Report**  
**Availability Factors (Percentage) for**  
**South Carolina Electric and Gas Company**

PLANT	UNIT	MW RATING	MAR 2004	APR 2004	MAY 2004	JUN 2004	JUL 2004	AUG 2004	SEP 2004	OCT 2004	NOV 2004	DEC 2004	JAN 2005
CANADYS	1	105	69.7	100.0	100.0	100.0	91.3	100.0	99.0	63.9	92.0	99.2	95.2
CANADYS	2	116	69.0	100.0	85.4	95.5	100.0	87.9	93.9	76.5	100.0	90.0	88.1
CANADYS	3	175	89.5	100.0	63.0	89.2	93.7	100.0	82.2	84.1	41.2	100.0	90.7
McMEEKIN	1	125	83.1	83.7	95.6	97.5	100.0	100.0	79.9	0.0	29.7	100.0	89.6
McMEEKIN	2	125	96.8	96.0	86.9	100.0	100.0	91.4	56.3	0.0	0.0	41.4	96.8
URQUHART	3	94	100.0	76.7	92.5	100.0	100.0	100.0	96.1	100.0	98.1	90.8	94.2
WATEREE	1	350	95.4	80.5	82.3	100.0	93.6	91.9	100.0	71.4	100.0	100.0	100.0
WATEREE	2	350	95.1	100.0	72.5	95.2	82.5	100.0	87.5	71.4	65.9	100.0	100.0
WILLIAMS		615	0.0	0.0	54.4	98.4	100.0	97.4	100.0	89.2	81.8	100.0	98.8
COPE		410	100.0	59.8	100.0	100.0	100.0	100.0	100.0	99.7	100.0	100.0	89.8
FOSSIL TOTALS		2465	79.9	79.7	83.3	97.6	96.1	96.9	89.5	65.6	70.9	92.1	94.3
JASPER CC	1	165	NA	NA	100.0	99.9	100.0	100.0	100.0	77.0	100.0	100.0	87.5
JASPER CC	2	165	NA	NA	99.7	99.9	99.9	100.0	100.0	77.4	100.0	100.0	94.4
JASPER CC	3	165	NA	NA	100.0	100.0	99.0	100.0	100.0	76.7	100.0	100.0	94.4
JASPER CC	4	385	NA	NA	98.7	99.9	99.1	98.5	100.0	76.6	100.0	100.0	94.4
URQUHART CC	5	233	100.0	100.0	80.6	100.0	100.0	100.0	100.0	77.4	100.0	100.0	100.0
URQUHART CC	1		100.0	100.0	80.6	100.0	100.0	100.0	100.0	77.4	100.0	100.0	100.0
URQUHART CC	6	241	100.0	100.0	80.6	100.0	100.0	100.0	100.0	61.3	100.0	100.0	89.1
URQUHART CC	2		100.0	100.0	80.6	100.0	100.0	100.0	100.0	61.3	100.0	100.0	100.0
CC TOTALS		1354											
V.C. SUMMER (SCE&G) (SCPSA)*		966	95.7	63.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	89.7	100.0
		644											
		322											

\* Represents South Carolina Public Service Authority's 1/3 ownership of VC Summer

Note 1: CC designates Combined-Cycle units

Note 2: Urquhart units 5&1 and 6&2 are two units

Note: Prepared by ORS

**Office of Regulatory Staff**  
**Power Plant Performance Data Report**  
**Capacity Factors (Percentage) for**  
**South Carolina Electric and Gas Company**

PLANT	MW RATING	YEAR 2001	YEAR 2002	YEAR 2003	YEAR 2004	MAR 2004	APR 2004	MAY 2004	JUN 2004	JUL 2004	AUG 2004	SEP 2004	OCT 2004	NOV 2004	DEC 2004	JAN 2005	Avg. (Review Pd.)
CANADYS	1	75.0	66.4	80.7	82.9	58.4	93.0	95.9	88.0	85.3	90.5	85.0	57.9	90.1	92.5	84.8	83.8
CANADYS	2	65.3	75.5	79.7	79.7	55.1	91.5	76.3	87.1	93.3	73.2	75.6	68.9	94.7	79.0	69.3	78.5
CANADYS	3	60.2	48.4	51.1	75.9	77.7	88.9	56.9	83.5	87.7	91.3	73.6	79.5	19.6	82.3	71.5	73.9
McMEEKIN	1	65.6	57.4	68.9	73.2	76.6	76.0	88.8	89.9	93.6	89.0	69.0	0.0	16.1	95.0	78.9	70.3
McMEEKIN	2	78.5	57.4	69.1	65.9	89.0	89.5	80.3	93.2	93.1	79.6	50.3	0.0	0.0	31.6	90.5	63.4
URQUHART	3	72.6	65.4	74.7	76.4	82.3	69.1	73.3	80.4	88.5	83.3	70.2	85.4	78.5	74.1	76.1	78.3
WATEREE	1	63.9	68.1	69.7	84.2	84.7	77.0	75.4	91.9	84.9	81.5	86.0	62.5	98.2	94.9	90.9	84.4
WATEREE	2	73.5	71.6	69.8	81.2	86.7	97.1	67.0	90.5	76.0	94.1	77.0	68.2	62.2	94.6	92.9	82.4
WILLIAMS		74.5	82.2	67.7	66.6	0.0	0.0	42.5	92.0	92.8	91.8	89.2	79.6	71.2	87.8	84.8	66.5
COPE	410	69.7	90.3	78.5	92.7	93.6	56.1	99.0	98.3	98.7	97.8	97.9	93.5	98.4	98.5	87.6	92.7
<b>FOSSIL TOTALS</b>	<b>2465</b>	<b>69.1</b>	<b>73.5</b>	<b>70.4</b>	<b>78.2</b>	<b>62.0</b>	<b>59.7</b>	<b>70.4</b>	<b>91.3</b>	<b>89.5</b>	<b>89.6</b>	<b>82.8</b>	<b>68.6</b>	<b>70.4</b>	<b>87.9</b>	<b>85.3</b>	<b>77.4</b>
JASPER CC	1					NA	NA	64.0	41.0	41.0	32.0	17.0	13.0	8.0	12.0	14.0	
JASPER CC	2					NA	NA	32.0	34.0	52.0	38.0	22.0	9.0	14.0	17.0	18.0	
JASPER CC	3					NA	NA	33.0	30.0	38.0	30.0	13.0	5.0	13.0	15.0	22.0	
JASPER CC	4					NA	NA	34.0	20.0	34.0	25.0	13.0	6.0	8.0	10.0	28.0	
URQUHART CC	5					6.0	30.0	16.0	2.0	12.0	5.0	3.0	2.0	2.0	0.0	13.0	
URQUHART CC	1					7.0	34.0	20.0	2.0	14.0	6.0	4.0	2.0	1.0	0.0	13.0	
URQUHART CC	6					3.0	9.0	0.0	0.0	11.0	8.0	4.0	0.0	0.0	0.0	5.0	
URQUHART CC	2					3.0	11.0	0.0	0.0	12.0	8.0	5.0	0.0	0.0	0.0	5.0	
<b>TOTAL CC CAP.</b>	<b>1354</b>																
<b>V.C. SUMMER</b>	<b>966</b>	<b>79.3</b>	<b>86.6</b>	<b>86.9</b>	<b>96.5</b>	<b>96.9</b>	<b>63.0</b>	<b>101.2</b>	<b>100.6</b>	<b>100.2</b>	<b>100.2</b>	<b>100.7</b>	<b>101.2</b>	<b>101.4</b>	<b>89.4</b>	<b>101.3</b>	<b>96.0</b>
(SCE&G)	644																
(SCPSA)*	322																

THE LIFETIME CAPACITY FACTOR FOR V.C.SUMMER THROUGH JANUARY 2005 IS 79.1%

\* Represents South Carolina Public Service Authority's 1/3 ownership of VC Summer.

Note1: CC designates Combined-Cycle units

Note 2: Urquhart units 5&1 And 6&2 are two units.

Note: Prepared by ORS

**Office of Regulatory Staff  
Fossil Unit Outage Report  
(100 Hrs or Greater Duration) for  
South Carolina Electric and Gas Company**

UNIT	DATE OFF	DATE ON	HOURS	TYPE	REASON FOR OUTAGE	CORRECTIVE ACTION
Canadys #1	03/12/04	03/21/04	222.25	Maintenance	HP Heater	Unit was taken off-line to perform a variety of work
Canadys #1	10/08/04	10/18/04	233.57	Planned	Coal Mill Repair	Four coal mills were repaired
Canadys #2	03/20/04	03/27/04	184.33	Maintenance	Boiler Leak	Unit was taken off-line to perform a variety of work
Canadys #2	10/16/04	10/23/04	175.00	Planned	Coal Mill Repair	Four coal mills were repaired
Canadys #3	05/10/04	05/22/04	275.28	Maintenance	Maintenance	Maintenance outage
Canadys #3	11/06/04	11/23/04	423.30	Planned	Hot Air Duct and Boiler Work	New coal mill hot air duct, repair tube leaks in #1 HP heater, replace insulation in boiler basement
Canadys #3	11/23/04	11/29/04	144.20	Reserve Shutdown	Economic Dispatch	N/A
Cope	04/12/04	04/24/04	288.80	Planned	Spring Outage	Spring Outage
McMeekin #1	03/26/04	04/04/04	202.75	Maintenance	Spring Outage	Planned Spring outage for boiler chemical cleaning
McMeekin #1	09/24/04	11/21/04	1377.25	Planned	Over Fired Air System	Installation of Over Fired Air System
McMeekin #2	09/17/04	12/16/04	2148.93	Planned	Over Fired Air System	Installation of Over Fired Air System
Urquhart #3	04/24/04	05/03/04	223.65	Maintenance	Spring Outage	Planned Spring outage
Urquhart #5&1	05/09/04	05/15/04	144.00	Planned	Scheduled	Spring Outage
Urquhart #5&1	10/03/04	10/10/04	168.00	Planned	Scheduled	Fall Outage
Urquhart #6&2	05/02/04	05/08/04	144.00	Planned	Scheduled	Spring Outage
Urquhart #6&2	10/03/04	10/15/04	288.00	Planned	Scheduled	Fall Outage
Wateree #1	04/25/04	05/02/04	176.75	Planned	Spring Outage	Spring outage boiler inspection
Wateree #1	07/30/04	08/03/04	108.13	Maintenance	Boiler Leak	Waterwall Leaks
Wateree #1	10/09/04	10/17/04	213.27	Planned	Fall Outage	Fall Outage
Wateree #2	05/03/04	05/09/04	150.90	Planned	Spring Outage	Planned Spring outage
Wateree #2	07/24/04	07/29/04	125.93	Maintenance	Boiler Leak	Waterwall Leaks
Wateree #2	10/23/04	11/11/04	457.27	Planned	Fall Outage	Fall Outage
Williams	03/01/04	05/14/04	1785.12	Planned	Spring Outage	Planned Spring outage
Williams	10/30/04	11/06/04	175.67	Planned	Fall Outage	Fall Outage

**EXHIBIT ARW-2  
Page 1 of 2**

**Note:** Prepared by ORS

**Office of Regulatory Staff  
V.C. Summer Nuclear Unit Outage Report for  
South Carolina Electric and Gas Company**

NO.	DATE OFF	DATE ON	HOURS	TYPE	REASON FOR OUTAGE	CORRECTIVE ACTION
1	03/30/04	04/11/04	292.7	Forced	Automatic reactor trip occurred during Manual shutdown to repair C RCP seal injection line	Repair C reactor coolant pump seal injection line
2	12/06/04	12/09/04	76.95	Forced	Steam leak in the extraction steam line	Replace the ruptured pipe

**EXHIBIT ARW-2  
Page 2 of 2**

**Note:** Prepared by ORS



**South Carolina**  
**Office of Regulatory Staff**  
**Generation Mix Report (March 2004 – January 2005) for**  
**South Carolina Electric and Gas Company**

<u>MONTH</u>	<u>PERCENTAGE</u>			
	<u>FOSSIL</u>	<u>NUCLEAR</u>	<u>COMBINED CYCLE</u>	<u>HYDRO</u>
<b>2004</b>				
<b>March</b>	64	25	7	4
<b>April</b>	70	18	6	6
<b>May</b>	60	22	13	5
<b>June</b>	67	19	9	5
<b>July</b>	64	19	12	5
<b>August</b>	68	19	9	4
<b>September</b>	69	21	5	5
<b>October</b>	68	25	3	4
<b>November</b>	69	24	3	4
<b>December</b>	73	19	4	4
<b>2005</b>				
<b>January</b>	64	25	7	4

Note: Prepared by ORS

**South Carolina**  
**Office of Regulatory Staff**  
**Generation Statistics for Major Plants**  
**(March 2004 – January 2005) for**  
**South Carolina Electric and Gas Company**

PLANT	TYPE FUEL	AVERAGE FUEL COST (CENTS/KWH*)	GENERATION (MWH)
Summer	Nuclear	0.50	5,038,741
McMeekin	Coal	1.97	1,352,298
Wateree	Coal	1.99	4,718,994
Cope	Coal	1.77	3,075,126
Williams	Coal	2.19	3,311,051
Urquhart	Coal	1.94	595,518
Canadys	Coal	2.07	2,493,327
Urquhart CC	Gas	5.19	230,476
Jasper CC	Gas	5.23	1,461,509

(\*) The average fuel costs for coal-fired plants include oil and/or gas cost for start-up and flame stabilization.

Note: Prepared by ORS

**Office of Regulatory Staff**  
**SC Retail Comparison of Estimated to Actual Energy Sales**  
**for South Carolina Electric and Gas Company**

	2004 <u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	2005 <u>JAN</u>	<u>TOTAL</u>
[1] ESTIMATED SALES [MWH]	1,668,000	1,639,000	1,768,000	1,997,000	2,252,000	2,273,000	2,166,000	1,810,000	1,666,000	1,789,000	1,918,000	20,946,000
[2] ACTUAL SALES [MWH]	1,795,785	1,598,901	1,797,955	2,237,721	2,295,098	2,247,840	2,046,684	1,787,093	1,678,565	1,796,540	1,930,223	21,212,405
[3] AMOUNT DIFFERENCE [1]-[2]	-127,785	40,099	-29,955	-240,721	-43,098	25,160	119,316	22,907	-12,565	-7,540	-12,223	-266,405
[4] PERCENT DIFFERENCE [3]/[2]	-7.12%	2.51%	-1.67%	-10.76%	-1.88%	1.12%	5.83%	1.28%	-0.75%	-0.42%	-0.63%	-1.26%

Note: Prepared by ORS

EXHIBIT ARW-5

**Office of Regulatory Staff**  
**SC Retail Comparison of Estimated to Actual Fuel Cost**  
**for South Carolina Electric and Gas Company**

	<u>2004</u> <u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>2005</u> <u>JAN</u>	<u>PERIOD</u> <u>AVERAGE</u>
[1] ORIGINAL PROJECTION	1.8173	1.7771	1.8997	1.9430	2.0497	2.0303	1.5914	1.8157	1.7544	1.9119	1.8368	1.8626
[2] ACTUAL EXPERIENCE	1.5140	2.1172	2.4889	1.9849	2.0745	1.9473	1.8021	1.8827	1.9651	2.004	2.0986	1.9874
[3] AMOUNT IN BASE	1.6780	1.6780	1.8210	1.8210	1.8210	1.8210	1.8210	1.8210	1.8210	1.8210	1.7640	
[4] VARIANCE	20.03%	-16.06%	-23.67%	-2.11%	-1.20%	4.26%	-11.69%	-3.56%	-10.72%	-4.60%	-12.47%	-6.28%
FROM ACTUAL [1-2]/[2]												

Note: Prepared by ORS

EXHIBIT ARW- 6

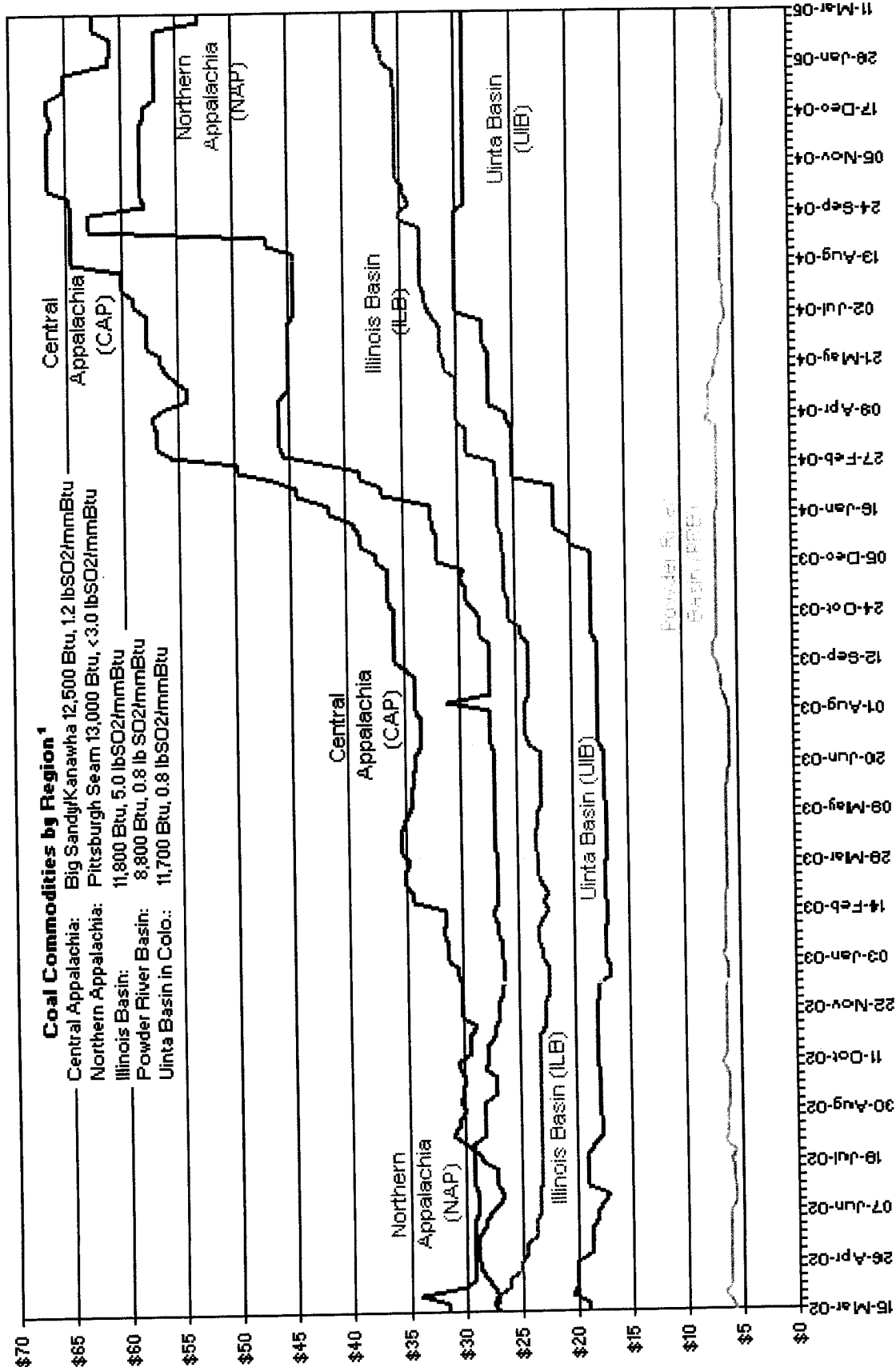
**South Carolina  
Office of Regulatory Staff  
History of Cumulative Recovery Account Report  
for South Carolina Electric and Gas Company**

<b>PERIOD ENDING</b>	<b>OVER (UNDER) \$</b>
January 1979 – Automatic Fuel Adjustment in Effect	
July 1979	4,427,600
April 1980	7,608,796
October 1980	( 462,050)
April 1981	2,188,451
October 1981	( 10,213,138)
April 1982	5,164,628
October 1982	9,937,268
April 1983	9,767,185
October 1983	( 4,527,441)
April 1984	( 2,646,395)
October 1984	( 3,211,158)
April 1985	( 9,545,054)
October 1985	( 6,115,435)
April 1986	2,474,301
October 1986	( 540,455)
April 1987	( 353,393)
October 1987	( 3,163,517)
April 1988	9,247,139
October 1988	2,717,342
April 1989	( 5,665,737)
October 1989	( 8,777,726)
April 1990	( 5,288,612)
October 1990	6,536,591
April 1991	7,180,922
October 1991	4,160,275
April 1992	15,835,472
October 1992	15,449,670
April 1993	16,006,551
October 1993	10,069,457
April 1994	2,646,301
October 1994	( 265,302)
April 1995	6,622,597
October 1995	4,202,766
February 1997	4,914,169
February 1998	596,797
February 1999	( 1,303,094)
February 2000	( 124,599)
February 2001	(60,454,498)
February 2002	(16,421,821)
February 2003	(17,429,464)
February 2004	(20,532,126)
January 2005	(23,979,198)

Note: Prepared by ORS

# **Average Weekly Coal Commodity Spot Prices Business Week Ended March 11, 2005**

**Dollars  
per Ton**



<sup>1</sup> Coal prices shown are for a relatively high-Btu coal selected in each region, for delivery in the "prompt" quarter. The "prompt quarter" is the next calendar quarter, with quarters shifting forward after the 15th of the month preceding each quarter's end.

Source: with permission, selected from listed prices in Platts Coal Outlook, "Weekly Price Survey."

**South Carolina**  
**Office of Regulatory Staff**  
  
**South Carolina Electric & Gas Company**  
**Forecasted Coal Costs**

Year	Tons	\$	\$/Ton
2005	7,257,467	429,216,398	59.14
2006	6,256,000	366,081,340	58.52
2007	6,366,000	398,420,920	62.59

**Note:** Prepared by ORS

**South Carolina  
Office of Regulatory Staff**

**Base Fuel Rate**

**Projected Period: May 2005 through April 2006 for  
South Carolina Electric & Gas Company**

1.	Projected Period Average Fuel Cost (\$/kwh)	\$ .02256
2.	One-half of Prior Period Under Recovery (\$000) (\$37,949)/2=	\$(18,974.5)
3.	Projected Retail Sales (gwh)-May 2005 through April 2006:	22,085
4.	One-half Prior Period Recovery Rate (\$/kwh)	\$ .00086
5.	Projected Period Average Fuel Cost (\$/kwh)	\$ .02256
6.	Adjustment for Fixed Natural Gas Transportation Charge Moved to Base Rates (\$/kwh)	\$ (.00086)
7.	Recommended Base Fuel Rate for Projected Period (4+5+6)	<u>\$ .02256</u>

EXHIBIT ARW-10



**BEFORE**  
**THE PUBLIC SERVICE COMMISSION**  
**OF SOUTH CAROLINA**  
**DOCKET NO. 2005-2-E**

IN RE: South Carolina Electric & Gas )  
Company – Annual Review )  
of Base Rates for Fuel )  
\_\_\_\_\_ )

**CERTIFICATE OF SERVICE**

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SC PUBLIC SERVICE  
COMMISSION


This is to certify that I, Cindy Clary, an employee with the Office of Regulatory Staff, have this date served one (1) copy of the **Direct Testimony of A.R. Watts and Jacqueline R. Cherry** in the above-referenced matter to the person(s) named below by causing said copy to be deposited in the United States Postal Service, first class postage prepaid and affixed thereto, and addressed as shown below:

Mitchell Willoughby, Esquire  
**Willoughby & Hoefer, P.A.**  
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Columbia, SC 29202

Damon E Xenopoulos , Esquire  
**Brickfield Burchette Ritts & Stone, PC**  
1025 Thomas Jefferson Street, NW - 8th Floor  
Washington, DC 20007

John F. Beach , Esquire  
**Ellis, Lawhorne & Sims, PA**  
1501 Main Street, 5th Floor  
Columbia, SC 29201

Scott Elliott, Esquire  
**Elliott & Elliott, P.A.**  
721 Olive Street  
Columbia, SC 29205

  
Cindy Clary

March 23, 2005  
Columbia, South Carolina

173284

**THE OFFICE OF REGULATORY STAFF**

**DIRECT TESTIMONY AND EXHIBITS**

**OF**

**Jacqueline R. Cherry**

RECEIVED  
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REVIEW DATE: OK R. Duke  
OFFICE: OK R. Duke

**DOCKET NO. 2005-2-E**  
**South Carolina Electric & Gas Company**  
**Annual Review**

**TESTIMONY OF JACQUELINE R. CHERRY**

**FOR**

**THE OFFICE OF REGULATORY STAFF**

**DOCKET NO. 2005-2-E**

**IN RE: SOUTH CAROLINA ELECTRIC & GAS COMPANY**

**Q. PLEASE STATE FOR THE RECORD YOUR NAME, BUSINESS ADDRESS AND OCCUPATION.**

**A.** My name is Jacqueline R. Cherry. My business address is 1441 Main Street, Suite 300, Columbia, South Carolina, 29201. I am employed by the Office of Regulatory Staff ("ORS") in the Audit Department, as an Audit Manager.

**Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.**

**A.** I received a B.S. Degree in Business Administration, with a major in Accounting from Johnson C. Smith University in 1976. I was employed by the Office of Regulatory Staff in October 2004. I have over 25 years of experience auditing utility companies, previously, for the Public Service Commission of South Carolina. I have participated in cases involving gas, electric, telephone, water and wastewater utilities.

**Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

---

**THE OFFICE OF REGULATORY STAFF  
1441 Main Street, Suite 300, Columbia, SC 29201  
Post Office Box 11263, Columbia, SC 29211**

1   **A.**   The purpose of my testimony is to summarize the results of ORS Audit  
2           Staff's examination of South Carolina Electric & Gas Company's ("the  
3           Company") Fuel Adjustment Clause operation for the period March  
4           2004 through April 2005. The findings of the examination are set forth  
5           below and in the exhibits attached to this testimony.

6   **Q.   PLEASE IDENTIFY THE EXHIBITS ATTACHED TO YOUR PREFILED**  
7           **TESTIMONY.**

8   **A.**   I have attached the Audit Report of the Office of Regulatory Staff for  
9           Docket No. 2005-2-E, South Carolina Electric & Gas Company's Annual  
10          Review of Base Rates for Fuel Costs. The contents of the Audit Report  
11          were either prepared by me or were prepared under my direction and  
12          supervision.

13   **Q.   WHAT WAS THE SCOPE OF YOUR AUDIT?**

14   **A.**   ORS Audit Staff traced the fuel information as filed in the Company's  
15          required monthly reports to the Company's books and records. The  
16          current fuel review period covered the period March 2004 through April  
17          2005. However, the ORS Audit Staff did not examine the months of  
18          February, March and April 2005 because the per book figures were not  
19          available. Estimated figures were used for those months. The purpose  
20          of the audit was to determine if South Carolina Electric & Gas Company  
21          had computed and applied the monthly Fuel Adjustment Clause in  
22          accordance with the approved clause and S.C. Code Ann. §58-27-

1 865(A). To accomplish this, ORS examined the components  
2 surrounding the operation of the clause.

3 **Q. WHAT WERE THE STEPS THAT THE ORS EMPLOYED WITHIN THE**  
4 **SCOPE OF THE AUDIT?**

5 **A.** The examination consisted of:

- 6 1. Analyzing the Fuel Stock Account – Account # 151
- 7 2. Sampling Receipts to the Fuel Stock Account – Account # 151
- 8 3. Verifying Charges to Nuclear Fuel Expense - Account # 518
- 9 4. Verifying Purchased & Interchange Power Fuel Costs
- 10 5. Verifying KWH Sales
- 11 6. Analyzing Spot Coal Purchasing Procedures
- 12 7. Recalculating the Fuel Adjustment Factors and Verifying the
- 13 Deferred Fuel Costs
- 14 8. Recalculating the True-up for the Over (Under)-Recovered
- 15 Fuel Costs
- 16 9. Verifying the Details of the Company's Fuel Costs

17 **Q. WITH REGARD TO THE TRUE-UP OF OVER/ (UNDER)-**  
18 **RECOVERED FUEL COSTS, WOULD YOU PLEASE ELABORATE**  
19 **ON ORS AUDIT STAFF'S COMPUTATION?**

20 **A.** ORS analyzed the cumulative over/ (under)-recovery of fuel costs that  
21 the Company incurred for the period March 2004 through January 2005.  
22 The cumulative (under)-recovery amount totaled (\$23,979,198). ORS  
23 then added the projected (under)-recovery of (\$4,236,120) for the  
24 month of February 2005, the projected (under)-recovery of (\$6,268,620)  
25 for the month of March 2005 and the projected (under)-recovery of

1 (\$8,216,250) for April 2005 to arrive at a cumulative (under)-recovery of  
2 (\$37,949,436). The Company's cumulative (under)-recovery as of April  
3 2005, per its testimony in Docket No. 2005-2-E {Exhibit No. – (JRH-1)},  
4 totals (\$37,949,440). The difference between the Company's and  
5 ORS's cumulative (under)-recovery totals \$4, which is based on  
6 rounding.

7 It should be noted that ORS's cumulative (under)-recovery of fuel  
8 costs as of actual January 2005 totaled (\$23,979,198). The Company's  
9 cumulative (under)-recovery total as of actual January 2005 totaled  
10 (\$24,190,208). The difference between the Company's and the ORS's  
11 cumulative (under)-recovery as of actual January 2005 totals \$211,010.  
12 ORS Audit Exhibit JRC-7, Computation of Unbilled Revenue, consisting  
13 of 4 pages, provides the explanation for this cumulative (under)-  
14 recovery difference as of January 2005.

15 As stated in South Carolina Electric & Gas Company's Adjustment  
16 for Fuel Costs, fuel costs will be included in base rates to the extent  
17 determined reasonable and proper by the Commission.

18 Accordingly, the Commission should consider the (under)-recovery of  
19 (\$37,949,436) along with the anticipated fuel costs for the period May 1,  
20 2005 through April 30, 2006, for the purpose of determining the base  
21 cost of fuel in base rates effective May 1, 2005. This (\$37,949,436)

(under)-recovery figure was provided to ORS's Electric and Gas Regulation Department.

**Q. MRS. CHERRY, WOULD YOU PLEASE EXPLAIN YOUR FIRST FOOTNOTE ON ORS AUDIT EXHIBIT JRC-7?**

**A.** The first footnote addresses ORS Audit Staff's cumulative (under)-recovery balance brought forward from February 2004 of (\$20,532,261), as reflected on this exhibit, and consists of two amounts. The first amount, (\$15,099,348), is the amount of the cumulative (under)-recovery balance as of February 2004, as shown on the PSC "Commission Staff Report" (Audit Exhibit G-Page 2 of 4), from SCE&G's last fuel review period (actual March 2003 – February 2004), Docket No. 2004-2-E. During the Company's last S.C. Fuel Adjustment Clause hearing, the Company and the Consumer Advocate agreed upon a stipulation concerning two previous dockets' fuel costs. The PSC Audit Staff agreed with the stipulation and the Commission approved the stipulation. In order to reflect the agreement with the stipulation, the PSC Audit Staff agreed that the Staff's carry-forward cumulative (under)-recovery difference from the Company of (\$5,432,913), from one of the previously contested dockets (Docket No. 2003-2-E), would have to be reconciled to the Company's actual February 2004 cumulative (under)-recovery balance. Therefore, the second amount is the carry-forward (under)-recovery Company vs. Staff difference of (\$5,432,913) added to Staff's

1 original cumulative (under)-recovery balance as of February 2004 of  
2 (\$15,099,348). Both figures are from the last fuel hearing. The sum of  
3 the two aforementioned figures is the amount at the beginning of this  
4 exhibit, (\$20,532,261). This amount, which is the same amount shown  
5 by the Company as its beginning over (under)-recovery balance from  
6 February 2004 for this review period, also reflects the settlement of any  
7 previous fuel dockets.

8 **Q. DID THE COMPANY MAKE ANY ADJUSTMENTS OR TRUE-UPS**  
9 **DURING THE ACTUAL REVIEW PERIOD?**

10 **A.** My second footnote in Audit Exhibit JRC-7 explains that in March, April,  
11 May, July, August, November and December 2004, the Company had  
12 true-ups due to various Company corrections and revisions to costs such  
13 as Fossil Fuel Costs, SO<sub>2</sub> Emissions Allowances and Purchased Power  
14 (Purchases and Sales) Costs. The amount applicable to the PSC-  
15 approved Stipulation of SCE&G and the Consumer Advocate, per the  
16 last fuel review period, \$25,618,063, is reflected in the May 2004 true-up  
17 adjustments as a reduction to the Fuel Adjustment Clause.

18 **Q. WHAT DID THE ORS AUDIT REVEAL CONCERNING THE**  
19 **URQUHART AND JASPER PLANTS' FIXED GAS**  
20 **TRANSPORTATION CHARGES?**

21 **A.** The third footnote in Audit Exhibit JRC-7 details that for each month of  
22 the review period, the Urquhart Plant Fixed Capacity Gas Transportation



1 Charge of \$673,417 is deducted, on a retail basis, from each monthly  
2 deferred fuel entry pursuant to PSC Order No. 2003-38. That PSC Order  
3 stated that these Fixed Gas Transportation Capacity Charges would be  
4 removed from the S.C. Fuel Adjustment Clause to allow recovery of  
5 these charges through base rates (per rate case), rather than through  
6 the clause. These charges are fixed monthly charges that do not vary  
7 with the consumption of natural gas. As stated in PSC Order No. 2003-  
8 38, these charges should "be included in base rates because of the fixed  
9 nature of the obligations." As of January 2005, the Jasper Plant Fixed  
10 Capacity Charge monthly retail amount of \$910,167, prorated for  
11 January 2005, is also treated on a retail basis as a reduction to the  
12 monthly Deferred Fuel Entries, per PSC Order No. 2005-2 (the  
13 Company's latest rate case order, effective January 6, 2005). Based on  
14 PSC Order No. 2005-2, as of January 6, 2005, the current review  
15 period's fuel factor was reduced by \$0.00057/kwh to reflect the removal  
16 of the Jasper Plant's Fixed Capacity Charge from the fuel clause  
17 calculations. Based on the same rationale as PSC Order No. 2003-38,  
18 the Jasper Plant Fixed Capacity Charges would be removed from the  
19 S.C. Fuel Adjustment Clause to allow recovery of these charges through  
20 base rates (per rate case), rather than through the clause. These  
21 charges are fixed monthly charges that do not vary with the consumption  
22 of natural gas. As stated in PSC Order No. 2005-2, these charges

1 should "be included in base rates because of the fixed nature of the  
2 obligations." Therefore, in January 2005 two base fuel factors are  
3 reflected, the Old Base Fuel Factor (before PSC Order No. 2005-2) of  
4 \$0.01821 and the New Base Fuel Factor (as of PSC Order No. 2005-2,  
5 dated January 6, 2005) of \$0.01764 (\$0.01821 less \$0.00057). January  
6 2005 Retail KWH Sales were prorated according to those Retail KWH  
7 Sales applicable to the Old Base Fuel Factor and to the New Base Fuel  
8 Factor. It was determined that 55% of the January 2005 Retail KWH  
9 Sales are applicable to the Old Base Fuel Factor and 45% are applicable  
10 to the New Base Fuel Factor. Using these prorated percentages, ORS  
11 Audit Staff and the Company then prorated the Fixed Capacity Charges  
12 of the Urquhart Plant and the Jasper Plant. In January 2005, under the  
13 Old Base Fuel Factor, the prorated amount for the Urquhart Plant was  
14 \$370,379 (\$673,417 x 55%). Under the New Base Fuel Factor, the  
15 prorated amount for the Urquhart Plant was \$303,038 (\$673,417 x 45%).  
16 The Jasper Plant prorated amount totaled \$409,575 (\$910,167 x 45%).  
17 The grand total for the Urquhart and Jasper Plants under the New Base  
18 Fuel Factor totaled \$712,613.

19 **Q. HOW DID THIS IMPACT THE (UNDER)-RECOVERY OF FUEL COSTS?**

20 **A.** As mentioned previously, the ORS cumulative (under)-recovery of fuel  
21 costs as of actual January 2005 totaled (\$23,979,198). The Company's  
22 cumulative (under)-recovery total as of actual January 2005 totaled

1 (\$24,190,208). The difference between the Company's and the ORS's  
2 cumulative (under)-recovery as of actual January 2005 totaled \$211,010.  
3 This difference was based on the Company originally using another  
4 methodology to prorate the Fixed Capacity Charges. However, the  
5 Company, in its testimony in Docket No. 2005-2-E {Exhibit No. – (JRH-1)},  
6 reflects a true-up adjustment in estimated February 2005 of \$211,009,  
7 which reconciles within a \$2 rounding difference (\$1 from January 2005's  
8 \$211,010 vs. \$211,009 difference; and \$1 from February 2005). The  
9 cumulative (under)-recovery balance as of estimated February 2005 of the  
10 Company totaled (\$26,631,736) and the ORS totaled (\$26,631,734).

11 **Q. MRS. CHERRY, WOULD YOU PLEASE DESCRIBE THE ORS AUDIT**  
12 **STAFF EXHIBITS?**

13 **A.** ORS prepared exhibits from South Carolina Electric & Gas Company's  
14 books and records reflecting fuel costs during the review period.

15 Specifically, these exhibits are as follows:

16 Exhibit JRC-1: Total Received & Weighted Average Cost

17 Exhibit JRC-2: Received Coal-Cost Per Ton (Per Plant)

18 Exhibit JRC-3: Received Coal-Cost Per Ton Comparison

19 Exhibit JRC-4: Burned Cost-Consumed Generation

20 Exhibit JRC-5: Cost of Fuel

21 Exhibit JRC-6: Factor Computation

22 Exhibit JRC-7: Computation of Unbilled Revenue

1 **Q. MRS. CHERRY, WHAT WERE THE RESULTS OF THE ORS AUDIT**  
2 **DEPARTMENT'S REVIEW?**

3 **A.** Based on the ORS Audit Staff's examination of South Carolina Electric &  
4 Gas Company's books and records, and the utilization of the fuel cost  
5 recovery mechanism as directed by the Commission, the ORS Audit  
6 Department is of the opinion that the Company has complied with the  
7 directives (per the Fuel Adjustment Clause) of the Commission.

8 **Q. MRS. CHERRY, DOES THIS CONCLUDE YOUR TESTIMONY?**

9 **A.** Yes, it does.

**REPORT OF THE AUDIT DEPARTMENT  
THE OFFICE OF REGULATORY STAFF**

**DOCKET NO. 2005-2-E**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY**

**REPORT OF THE AUDIT DEPARTMENT**

**THE OFFICE OF REGULATORY STAFF**

**DOCKET NO. 2005-2-E**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY**

**ANNUAL REVIEW OF BASE RATES FOR FUEL COSTS**

**REVIEW PERIOD: MARCH 1, 2004 – JANUARY 31, 2005 (ACTUAL)**

**INDEX**

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Exhibit JRC-2: Received Coal-Cost Per Ton (Per Plant) -----	12
Exhibit JRC-3: Received Coal-Cost Per Ton Comparison-----	13
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**Note:** All of the ORS Audit Exhibits were prepared by the ORS Audit Staff.

# **REPORT OF THE AUDIT DEPARTMENT**

**DOCKET NO. 2005-2-E**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY**

**ANNUAL REVIEW OF BASE RATES FOR FUEL COSTS**

## **INTRODUCTION**

The Office of Regulatory Staff's (ORS) Audit Department has made an examination of the books and records of South Carolina Electric & Gas Company, Columbia, South Carolina, relative to the Public Service Commission's requirement under Docket No. 2005-2-E and S.C. Code Ann. §58-27-865(A), that periodic hearings be conducted before the Commission concerning the Adjustment of Base Rates for Fuel Costs.

## **CURRENT REVIEW PERIOD**

The current examination of South Carolina Electric & Gas Company's retail Fuel Adjustment Clause covered the period of March 2004 through April 2005. However, the ORS Audit Staff did not examine the months of February, March, and April 2005 because the per book figures were not available during ORS's audit. The amounts of over/(under)-recovery for February 2005, March 2005 and April 2005 were estimated for the purpose of adjusting base rates effective May 1, 2005. The estimates will be trued-up at South Carolina Electric & Gas Company's ("the Company") next hearing. Finally, it should be noted that the original hearing date of March 30, 2005 was rescheduled by the Public Service Commission to April 6, 2005.

## **SCOPE OF EXAMINATION**

The ORS Audit Department's examination consisted of:

1. Analyzing the Fuel Stock Account -- Account #151
2. Sampling Receipts to the Fuel Stock Account – Account # 151
3. Verifying Charges to Nuclear Fuel Expense – Account # 518
4. Verifying Purchased & Interchange Power Fuel Costs
5. Verifying KWH Sales
6. Analyzing Spot Coal Purchasing Procedures
7. Recalculating the Fuel Costs Adjustment Factors and Verifying Unbilled Revenue
8. Recalculating the True-up for the Over (Under)-Recovered Fuel Costs
9. Verifying the Details of the Company's Fuel Costs

### **1. ANALYZING THE FUEL STOCK ACCOUNT -- ACCOUNT # 151**

ORS's analysis of the Fuel Stock Account consisted of tracing receipts and issues from the fuel management system to the General Ledger, reviewing monthly journal entries originating in fuel accounting, and ensuring that only proper charges are entered in the Company's computation of fuel costs for purposes of adjusting base rates for fuel costs.



## **2. SAMPLING RECEIPTS TO THE FUEL STOCK ACCOUNT –**

### **ACCOUNT # 151**

ORS's sample of coal receipts to the Fuel Stock Account consisted of randomly selecting transactions, tracing each of these randomly selected transactions to a coal receiving report, waybill, freight study detailed report, and the fuel management system payment voucher for documentation purposes. It also consisted of recalculating the transactions to insure mathematical accuracy.

## **3. VERIFYING CHARGES TO NUCLEAR FUEL EXPENSE –**

### **ACCOUNT # 518**

ORS traced the expense amounts for nuclear fuel to the books and records for the period March 2004 through January 2005 to verify the accuracy of the expenses to fuel amortization schedules.

## **4. VERIFYING PURCHASED AND INTERCHANGE POWER FUEL COSTS**

ORS verified the Company's Purchased and Interchange Power Fuel Costs to summary sheets provided to the Company's Electric Pricing Department by the Company's Operations Department. Fuel costs, KWH purchases and sales for the period March 2004 through January 2005 were traced to system reports, and on a sample basis, were traced to monthly invoices. ORS Purchased Power figures for March 2004 through January 2005 and the resultant over (under)-recovery monthly deferred fuel amounts for March 2004 through January 2005 reflect calculations which comply with the revised section of the S.C. Fuel Statute (updated as of February 2004), S.C. Code Ann. §58-27-865(A). This Statute addresses "fuel costs related to purchased power." Sub-section

(A)(2)(b) of the revised Statute stated that the delivered cost of economy purchases, including transmission charges, could be included in Purchased Power Costs if those types of purchases were proven to be "less than the purchasing utility's avoided variable costs for the generation of an equivalent quantity of electric power." The Company's per books economic purchases included wheeling (transmission) charges for the review period which totaled \$390,747. ORS applied this revised Statute to the examined economic purchases along with the applicable avoided costs. ORS Audit Staff noted no exceptions to Purchased Power Costs. It should be noted that since the Company's last fuel review period, the Company has implemented an "in-house" procedure that audits the Company's avoided costs information in relation to the Company's hourly purchase power records. Since this procedure is performed weekly, it enables the Company to monitor more closely and if needed, to quickly correct its avoided costs versus purchase price transactions.

## **5. VERIFYING KWH SALES**

ORS verified total system sales, as filed in the monthly factor computation, for the months of March 2004 through January 2005. This monthly figure was then used to determine the fuel cost per KWH sold.

## **6. ANALYZING SPOT COAL PURCHASING PROCEDURES**

ORS examined the procedure followed by the Company's Fuel Procurement Department in soliciting and accepting bids on spot coal. To accomplish this, ORS examined each month of the audit period in which several spot coal bids were received.

The Fuel Procurement Department maintains a list of coal vendors from whom bids are solicited. The Company mails each of these coal vendors a letter which states the necessary requirements for the coal the Company seeks and the information needed concerning the coal producer and the fuel quality standards. The Company's fuel representatives negotiate over the price of the coal and either accept or reject the coal vendor's offer. The Company's fuel representatives determine the current market price for spot coal prior to contacting the coal vendors to discuss the vendors' offers. In this way, the fuel representatives determine the price limits which should be observed when bargaining for coal. Fuel representatives generally consider several factors when evaluating spot coal bids including the price in \$/MMBTU (including freight), whether the coal is suitable on an operational and environmental basis (for example, the BTU content of the coal offered), and the reliability of the producer. The Company receives bids in writing, but telephone, email and fax bids are often received. Upon acceptance of a bid, the Company prepares a confirming order, a copy of which is mailed to the coal vendor. The Company or the vendor, based on negotiations, analyzes the coal for moisture, ash, sulfur, and BTU content and prepares an analysis report, which is sent to the Fuel Procurement Department. The appropriate quality premium or penalty on the coal purchased is determined, and the results are forwarded to the Company's Accounting Section, which in turn, adds a premium or assesses a penalty to the total amount due to the coal vendor.

The Fuel Procurement Department closely monitors the quality of coal shipped by the various producers. If less than guaranteed performance is

rendered by a certain producer, the Company's fuel representative accesses this information and considers this when analyzing any future offers received from the supplier.

As previously mentioned, ORS examined spot coal bids received for each month during the review period. The examination included reviewing any bids accepted and also those that were rejected.

During the review period, out of approximately one hundred and thirty-two bids, the Company accepted thirty-three offers and rejected ninety-nine offers.

The total spot coal tons purchased for the period March 2004 through January 2005 were 944,997 tons.

## **7. RECALCULATING THE FUEL COSTS ADJUSTMENT FACTORS AND VERIFYING UNBILLED REVENUE**

ORS recomputed the fuel adjustment factors utilizing information obtained from the Company's records.

With reference to fuel cost, ORS verified the Total Fuel Costs for the months of March 2004 through January 2005 to the Company's books and records.

In recomputing the monthly factors, ORS divided the Total Cost of Fuel Burned by Total System Sales to arrive at fuel costs per KWH sales. The base fuel cost per KWH, included in the base rates, is then subtracted from the fuel cost per KWH sales and the resulting figure represents the fuel cost adjustment above or below base per KWH sales. The South Carolina Retail Jurisdictional KWH deferrals were checked to the Company's records. The actual Unbilled Revenue for each month was verified to the Company's Detailed Ledger.

## **8. RECALCULATING THE TRUE-UP FOR THE OVER / (UNDER)- RECOVERED FUEL COSTS**

ORS analyzed the cumulative over/ (under)-recovery of fuel costs that the Company had incurred for the period March 2004 through January 2005. The cumulative (under)-recovery amount totaled (\$23,979,198). ORS added the projected (under)-recovery of (\$4,236,120) for the month of February 2005, the projected (under)-recovery of (\$6,268,620) for the month of March 2005 and the projected (under)-recovery of (\$8,216,250) for April 2005 to arrive at a cumulative (under)-recovery of (\$37,949,436). The Company's cumulative (under)-recovery as of April 2005, per its testimony in Docket No. 2005-2-E {Exhibit No. – (JRH-1)}, totals (\$37,949,440). The difference between the Company's and ORS's cumulative (under)-recovery as of estimated April 2005 totals \$4, which is based on rounding. It should be noted that ORS's cumulative (under)-recovery of fuel costs as of actual January 2005 totaled (\$23,979,198). The Company's cumulative (under)-recovery total as of actual January 2005 totaled (\$24,190,208). The difference between the Company's and ORS's cumulative (under)-recovery as of actual January 2005 totals \$211,010. This difference is based on ORS's usage of the Company's computed retail KWH Sales applicable to the Old Base Fuel Factor (before the effective date in January 2005 of the Company's latest rate case, per PSC Order No. 2005-2) and those retail KWH Sales applicable to the New Base Fuel Factor (after the effective date in January 2005 of the rate case as set by PSC Order No. 2005-2) as compared to the total January 2005 retail KWH Sales to arrive at percentages of 55% and 45%, respectively. These percentages are then used in prorating the Fixed Capacity

Charges of the Urquhart Plant and the Jasper Plant. The Fixed Capacity Charges are shown as reductions, on a retail basis, to the deferred fuel account in the S.C. Fuel Adjustment Clause. The Company, in its testimony in Docket No. 2005-2-E {Exhibit No. – (JRH-1)}, reflects a true-up adjustment, in estimated February 2005, of \$211,009, which reconciles within a \$2 rounding difference (\$1 from January 2005's \$211,010 vs. \$211,009 difference; and \$1 from February 2005), the cumulative (under)-recovery balance as of estimated February 2005 by the Company, which totaled (\$26,631,736) and the ORS, which totaled (\$26,631,734). ORS Audit Exhibit JRC-7, Computation of Unbilled Revenue, consisting of 4 pages, provides detailed explanations and reflects the cumulative (under)-recovery balance as of actual January 2005 through estimated April 2005.

As stated in South Carolina Electric & Gas Company's Adjustment for Fuel Costs, fuel costs will be included in base rates to the extent determined reasonable and proper by the Commission.

Accordingly, the Commission should consider the (under)-recovery of (\$37,949,436) along with the anticipated fuel costs for the period May 1, 2005 through April 30, 2006 for the purpose of determining the base cost of fuel in base rates effective May 1, 2005. The (\$37,949,436) (under)-recovery figure was provided to the ORS's Electric and Gas Regulation Department.

## **9. VERIFYING THE DETAILS OF THE COMPANY'S FUEL COSTS**

Details of fuel costs are shown in Audit Exhibits JRC-1 through JRC-7.

## **RESULTS OF EXAMINATION**

Based on the ORS Audit Staff's examination of South Carolina Electric & Gas Company's books and records, and the utilization of the fuel costs recovery mechanism as directed by this Commission, the ORS Audit Staff is of the opinion that the Company has complied with the directives of the Commission.

### **EXHIBITS**

Exhibits relative to this report are identified as follows:

#### **EXHIBIT JRC-1: TOTAL RECEIVED AND WEIGHTED AVERAGE COST**

This exhibit reflects the total cost for the period March 2004 through January 2005, for the four types of fossil fuel: coal, # 2 oil, propane and natural gas. The Staff has also computed the weighted average cost of each type of fuel.

#### **EXHIBIT JRC-2: RECEIVED COAL-COST PER TON (PER PLANT)**

This exhibit shows the received cost per ton for coal at each plant for the period of time from March 2004 through January 2005, in dollars per ton including freight costs.

#### **EXHIBIT JRC-3: RECEIVED COAL – COST PER TON COMPARISON**

This exhibit reflects the received cost per ton for coal at each period of time from March 2004 through January 2005 for South Carolina Electric & Gas Company, Duke Power Company, and Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc. ORS has shown for comparison purposes, the

invoice cost per ton, freight cost per ton, total cost per ton and the cost per MBTU.

#### **EXHIBIT JRC-4: BURNED COST-CONSUMED GENERATION**

This exhibit reflects the per book cost of burned fuel, including emission allowance expenses, which was used for generation for the period March 2004 through January 2005. The burned cost of each class of fuel is separated and the percentage of total burned computed for each type.

#### **EXHIBIT JRC-5: COST OF FUEL**

This exhibit reflects the cost of fuel for the period March 2004 through January 2005.

#### **EXHIBIT JRC-6: FACTOR COMPUTATION**

This exhibit reflects the actual computation of the fuel adjustment factor for the period March 2004 through January 2005.

#### **EXHIBIT JRC-7: COMPUTATION OF UNBILLED REVENUE**

This exhibit reflects the computation of the unbilled revenue at April 30, 2005. The balance amounts to an (under)-recovery of (\$37,949,436). This balance represents the difference between actual (with three months estimated) total fuel costs and unbilled fuel costs for the Company's retail customers for the period.



Audit Exhibit JRC-1

South Carolina Electric & Gas Company  
Total Received and Weighted Average Cost  
March 2004 - January 2005

Month	Coal Tons	Coal \$	#2 Oil Gal	#2 Oil \$	Propane Gal	Propane \$	MCF	Gas \$	Total Received	
									Cost	\$
Mar-04	529,882	24,800,799	384,898	429,170	361	353	158,740	1,667,487	26,897,809	
Apr-04	615,101	31,330,462	218,746	226,192	0	0	568,248	4,257,037	35,813,691	
May-04	561,783	27,854,929	1,298,128	1,432,806	340	360	2,012,294	16,771,614	46,059,709	
Jun-04	570,303	29,915,288	289,521	311,944	400	404	1,609,120	12,655,736	42,883,372	
Jul-04	529,121	25,684,460	187,225	207,078	465	512	2,240,130	15,914,836	41,806,886	
Aug-04	657,800	34,474,897	243,044	307,326	970	1,194	1,639,780	11,882,444	46,665,861	
Sep-04	476,629	24,911,362	3,229,727	4,235,754	685	817	870,228	6,938,807	36,086,740	
Oct-04	551,711	28,128,240	563,216	873,321	440	561	406,354	3,188,501	32,190,623	
Nov-04	619,190	33,982,529	181,299	274,869	302	372	489,259	5,723,274	39,981,044	
Dec-04	495,838	24,997,110	66,351	106,294	0	0	641,661	6,622,690	31,726,094	
Jan-05	735,096	44,610,429	688,677	965,552	0	0	1,023,348	9,216,645	54,792,626	
Total	6,342,454	330,690,505	7,350,832	9,370,306	3,963	4,573	11,659,162	94,839,071	434,904,455	
Weighted Average Cost		\$52.14		\$1.27		\$1.15		\$8.13		

Note: Prepared by the ORS Audit Staff.

South Carolina Electric & Gas Company  
Received Coal - Cost Per Ton (Per Plant)  
March 2004 - January 2005

<u>Plant</u>	<u>Mar-04</u>	<u>Apr-04</u>	<u>May-04</u>	<u>Jun-04</u>	<u>Jul-04</u>	<u>Aug-04</u>	<u>Sep-04</u>	<u>Oct-04</u>	<u>Nov-04</u>	<u>Dec-04</u>	<u>Jan-05</u>
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Canadys	43.03	47.96	49.02	48.38	52.96	51.94	52.50	50.70	51.27	52.47	53.75
Cope	43.95	46.40	47.53	51.12	47.34	45.62	48.31	48.48	48.66	44.98	51.30
McMeekin	46.07	51.44	49.18	48.80	51.38	49.10	49.29	48.69	49.41	57.45	56.32
SRS/D Area	46.70	51.61	48.72	55.76	46.98	48.88	54.17	50.22	51.47	50.23	54.43
Urquhart	44.74	46.25	48.90	45.95	46.29	46.29	45.91	43.35	47.09	47.42	51.52
Wateree	50.90	53.07	53.01	52.45	49.72	51.23	56.31	50.24	53.12	51.21	54.73
Williams	43.22	56.82	48.53	58.69	44.11	61.06	54.58	55.77	63.87	58.32	73.64
Total System	46.81	50.93	49.59	52.45	48.54	52.40	52.27	50.99	54.88	50.41	60.68

Note: Prepared by the ORS Audit Staff.

**South Carolina Electric & Gas Company  
Received Coal-Cost Per Ton Comparison  
March 2004 - January 2005**

<b>South Carolina Electric &amp; Gas Company</b>				
	<u>Invoice Cost</u>	<u>Freight Cost</u>	<u>Total Cost Per</u>	
<u>Month</u>	<u>Per Ton</u>	<u>Per Ton</u>	<u>Ton</u>	<u>Cost Per MBTU</u>
	\$	\$	\$	\$
Mar-04	33.19	13.62	46.81	1.8470
Apr-04	37.53	13.40	50.93	2.0176
May-04	37.52	12.07	49.59	1.9566
Jun-04	39.53	12.92	52.45	2.0821
Jul-04	35.93	12.61	48.54	1.9187
Aug-04	41.14	11.26	52.40	2.0844
Sep-04	38.07	14.20	52.27	2.0901
Oct-04	37.82	13.17	50.99	2.0357
Nov-04	43.54	11.34	54.88	2.1668
Dec-04	37.47	12.94	50.41	2.0026
Jan-05	49.94	10.74	60.68	2.3853

<b>Duke Power Company</b>				
	<u>Invoice Cost</u>	<u>Freight Cost</u>	<u>Total Cost Per</u>	
<u>Month</u>	<u>Per Ton</u>	<u>Per Ton</u>	<u>Ton</u>	<u>Cost Per MBTU</u>
	\$	\$	\$	\$
Mar-04	32.02	15.68	47.70	1.9387
Apr-04	32.18	15.41	47.59	1.9331
May-04	32.46	15.55	48.01	1.9591
Jun-04	32.05	16.54	48.59	1.9922
Jul-04	33.39	16.80	50.19	2.0517
Aug-04	34.25	16.52	50.77	2.0639
Sep-04	33.74	16.76	50.50	2.0631
Oct-04	32.17	16.54	48.71	1.9980
Nov-04	35.08	14.56	49.64	2.0264
Dec-04	33.79	17.42	51.21	2.1058
Jan-05	35.89	16.92	52.81	2.1615

<b>Carolina Power &amp; Light Company d/b/a Progress Energy Carolinas, Inc.</b>				
	<u>Invoice Cost</u>	<u>Freight Cost</u>	<u>Total Cost Per</u>	
<u>Month</u>	<u>Per Ton</u>	<u>Per Ton</u>	<u>Ton</u>	<u>Cost Per MBTU</u>
	\$	\$	\$	\$
Mar-04	31.81	16.40	48.21	1.9337
Apr-04	36.42	14.61	51.03	2.0560
May-04	35.64	15.03	50.67	2.0446
Jun-04	38.54	14.53	53.07	2.1495
Jul-04	44.20	13.78	57.98	2.3376
Aug-04	43.73	13.92	57.65	2.3394
Sep-04	41.02	14.02	55.04	2.2249
Oct-04	38.67	15.17	53.84	2.1706
Nov-04	41.14	14.84	55.98	2.2514
Dec-04	46.81	18.15	64.96	2.6387
Jan-05	44.38	18.58	62.96	2.5318

**Note:** Prepared by the ORS Audit Staff.

South Carolina Electric & Gas Company  
Burned Cost-Consumed Generation  
March 2004 - January 2005

Month	Coal	#2 Oil	Propane	Gas	SO2 Emission Allowance	Nuclear	Total Burned
	\$	\$	\$	\$	\$	\$	Cost
	%	%	%	%	%	%	%
Mar-04	21,309,372	261,931	189	3,334,807	488,134	2,341,438	27,735,871
Apr-04	20,034,149	81,249	205	4,897,885	404,810	1,486,796	26,905,094
May-04	21,292,545	463,120	157	16,768,387	386,222	2,443,348	41,353,779
Jun-04	24,374,815	165,260	406	12,647,758	480,371	2,363,408	40,032,018
Jul-05	23,149,752	354,990	392	15,914,649	404,864	2,441,477	42,266,124
Aug-04	24,779,985	138,001	844	11,881,836	484,358	2,441,840	39,726,864
Sep-04	21,308,013	347,625	633	6,938,690	433,474	2,365,763	31,394,198
Oct-04	18,454,148	437,893	483	4,451,653	301,225	2,446,865	26,092,267
Nov-04	19,035,506	201,496	58	5,718,143	401,215	2,370,413	27,726,831
Dec-04	22,774,310	183,939	144	6,606,750	566,381	2,170,690	32,302,214
Jan-05	24,233,644	580,741	48	9,202,205	306,076	2,447,788	36,770,502
Totals	240,746,239	3,216,245	3,559	98,362,763	4,657,130	25,319,826	372,305,762

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Percentage (%) of Total Burned Cost

64.66%

0.87%

0%

26.42%

1.25%

6.80%

Note: Prepared by the ORS Audit Staff.

**South Carolina Electric & Gas Company**  
**Cost of Fuel**  
**March 2004 - January 2005**

<u>Month</u>	<u>Total Cost of Fuel Burned</u> \$	<u>Purchased and Interchange Power Fuel Cost</u> \$	<u>Fuel Cost Recovered Intersystem Sales</u> \$	<u>Total Fuel Cost</u> \$
Mar-04	27,735,871	2,619,643	(3,167,578)	27,187,936
Apr-04	26,905,094	7,883,505	(937,114)	33,851,485
May-04	41,353,779	8,364,233	(4,968,984)	44,749,028
Jun-04	40,032,018	9,364,118	(4,979,530)	44,416,606
Jul-04	42,266,124	11,498,396	(6,153,718)	47,610,802
Aug-04	39,726,864	10,259,900	(6,215,664)	43,771,100
Sep-04	31,394,198	9,630,390	(4,140,731)	36,883,857
Oct-04	26,092,267	10,713,083	(3,159,210)	33,646,140
Nov-04	27,726,831	9,723,820	(4,465,823)	32,984,828
Dec-04	32,302,214	10,233,150	(6,532,888)	36,002,476
Jan-05	36,770,502	11,845,383	(8,107,274)	40,508,611
<b>Totals</b>	<b>372,305,762</b>	<b>102,135,621</b>	<b>(52,828,514)</b>	<b>421,612,869</b>

**Note:** Prepared by the ORS Audit Staff.

**South Carolina Electric & Gas Company  
Factor Computation  
March 2004 - January 2005**

<u>Month</u>	<u>Total Fuel Costs</u>	<u>Total System Sales</u>	<u>Fuel Cost per KWH Sales</u>	<u>Base Cost Per KWH Included in Rates</u>	<u>Fuel Adjustments Per KWH</u>
		<u>Excluding Intersystem Sales</u>			
	\$	KWH	\$/KWH	\$/KWH	\$/KWH
Mar-04	27,187,936	1,795,784,607	0.015140	0.01678	(0.00164)
Apr-04	33,851,485	1,598,901,484	0.021172	0.01678	0.00439
May-04	44,749,028	1,797,954,971	0.024889	0.01821	0.00668
Jun-04	44,416,606	2,237,720,577	0.019849	0.01821	0.00164
Jul-04	47,610,802	2,295,097,885	0.020745	0.01821	0.00254
Aug-04	43,771,100	2,247,839,912	0.019473	0.01821	0.00126
Sep-04	36,883,857	2,046,684,165	0.018021	0.01821	(0.00019)
Oct-04	33,646,140	1,787,092,704	0.018827	0.01821	0.00062
Nov-04	32,984,828	1,678,565,193	0.019651	0.01821	0.00144
Dec-04	36,002,476	1,796,540,265	0.020040	0.01821	0.00183
Jan-05 (1)	40,508,611	1,930,223,247	0.020986	0.01821	0.00278
Jan-05 (2)	40,508,611	1,930,223,247	0.020986	0.01764	0.00335

(1) Old Base Factor

(2) New Base Factor (Reflects the Commission approved rate of 0.01764, per Commission Order No. 2005-2, which is the Old Base Factor of \$0.01821 less the reduction of \$0.00057/Kwh. This reflects the removal of the Jasper Plant's Fixed Capacity Charge from the fuel clause).

Note: Prepared by the ORS Audit Staff.

South Carolina Electric & Gas Company  
Computation of Unbilled Revenue  
March 2004 - April 2005

	ACTUAL									
	March 2004	April 2004	May 2004	June 2004	July 2004	August 2004	September 2004			
Fossil Fuel Burned	25,394,433	25,418,298	38,910,431	37,688,610	39,824,647	37,285,024	29,028,435			
Nuclear	2,341,438	1,486,796	2,443,348	2,363,408	2,441,477	2,441,840	2,365,763			
Purchase & Interchange Pwr.	2,619,643	7,883,505	8,364,233	9,364,118	11,498,396	10,259,900	9,630,390			
Sub-total	30,355,514	34,788,599	49,718,012	49,396,136	53,764,520	49,986,764	41,024,588			
Less: Intersystem Sales	3,167,578	937,114	4,968,984	4,979,530	6,153,718	6,215,664	4,140,731			
Total Fuel Costs	27,187,936	33,851,485	44,749,028	44,416,606	47,610,802	43,771,100	36,883,857			
Total System KWH Sales Excluding Intersystem Sales	1,795,784,607	1,598,901,484	1,797,954,971	2,237,720,577	2,295,097,885	2,247,839,912	2,046,684,165			
\$/KWH Sales	0.015140	0.021172	0.024889	0.019849	0.020745	0.019473	0.018021			
Less: Base	0.016780	0.016780	0.018210	0.018210	0.018210	0.018210	0.018210			
Fuel Adjustment Per KWH	0.00164	(0.00439)	(0.00668)	(0.00164)	(0.00254)	(0.00126)	0.00019			
Unbilled Revenue KWH Sales	1,683,013,354	1,489,107,437	1,656,214,266	2,091,538,341	2,137,305,492	2,100,838,843	1,922,685,836			
Deferred Fuel Entry	2,760,142	(6,537,182)	(11,063,511)	(3,430,123)	(5,428,756)	(2,647,057)	365,310			
Company's True-Up Adjustments (Prior Months) (2)	(649,677)	117,811	25,433,968	-	(83,662)	21,373	-			
Less: Fixed Capacity Charge (3)	673,417	673,417	673,417	673,417	673,417	673,417	673,417			
February 2004 - (1)	\$ (20,532,261)	(1)								
Cumulative Over/(Under) Recovery	(17,748,379)	(23,494,333)	(8,450,459)	(11,207,165)	(16,046,166)	(17,998,433)	(16,959,706)			

Please Note:  
In Audit Exhibit JRC-7, ORS reflects Over-Recovery amounts without parentheses and reflects (Under)-Recovery amounts within parentheses.

ORS would like to emphasize that the Urquhart Plant (Combined Cycle) Fixed Capacity Charge monthly amount of \$ 673,417 is treated, per PSC Order No. 2003-38, on a retail basis as a reduction to the monthly Deferred Fuel Entries. The Jasper Plant (Combined Cycle) Fixed Capacity Charge monthly amount of \$910,167, prorated for January 2005, is also treated, per PSC Order No. 2005-2, on a retail basis as a reduction to the monthly Deferred Fuel Entries.

\*Explanation of Footnotes on Audit Exhibit JRC-7, Page 3 of 4 and Page 4 of 4.

Note: Prepared by the ORS Audit Staff.

South Carolina Electric & Gas Company  
Computation of Unbilled Revenue  
March 2004 - April 2005

	ACTUAL					ESTIMATED				
	October 2004	November 2004	December 2004	Old Base Factor January 2005	New Base Factor January 2005	February 2005	March 2005	April 2005		
Fossil Fuel Burned	23,645,402	25,356,418	30,131,524	34,322,714	34,322,714	25,593,000	23,790,000	28,923,000		
Nuclear	2,446,865	2,370,413	2,170,690	2,447,788	2,447,788	2,049,000	2,274,000	1,683,000		
Purchase & Interchange Pwr	10,713,083	9,723,820	10,233,150	11,845,383	11,845,383	13,013,000	13,820,000	11,634,000		
Sub-total	36,805,350	37,450,651	42,535,364	48,615,885	48,615,885	40,655,000	39,884,000	42,240,000		
Less: Intersystem Sales	3,159,210	4,465,823	6,532,888	8,107,274	8,107,274	3,592,000	2,267,000	3,848,000		
Total Fuel Costs	33,646,140	32,984,828	36,002,476	40,508,611	40,508,611	37,063,000	37,617,000	38,392,000		
Total System KWH Sales Excluding Intersystem Sales	1,787,092,704	1,678,565,193	1,796,540,265	1,930,223,247	1,930,223,247	1,844,000,000	1,753,000,000	1,677,000,000		
\$/KWH Sales	0.018827	0.019651	0.020040	0.020986	0.020986	0.020099	0.021459	0.022893		
Less: Base	0.018210	0.018210	0.018210	0.018210	0.018210	0.017640	0.017640	0.017640		
Fuel Adjustment Per KWH	(0.00062)	(0.00144)	(0.00183)	(0.00278)	(0.00278)	(0.00246)	(0.00382)	(0.00525)		
Unbilled Revenue KWH Sales	1,678,212,713	1,564,978,859	1,675,018,617	992,713,974	809,834,180	1,722,000,000	1,641,000,000	1,565,000,000		
Deferred Fuel Entry	(1,040,492)	(2,253,570)	(3,065,284)	(2,759,745)	(2,712,945)	(4,236,120)	(6,268,620)	(8,216,250)		
Company's True-Up Adjustments (Prior Months) (2)	-	1,625,842	83,459	-	-	-	-	-		
Less: Fixed Capacity Charge (3)	673,417	673,417	673,417	370,379	712,613	1,583,584	1,583,584	1,583,584		
September 2004 - (p. 1 of 4)	(16,959,706)									
Cumulative Over/(Under) Recovery	(17,326,781)	(17,281,092)	(19,589,500)	(23,979,198)	(23,979,198)	(26,631,734)	(31,316,770)	(37,949,436)		

Please Note:  
In Audit Exhibit JRC-7, ORS reflects Over-Recovery amounts without parentheses and reflects (Under)-Recovery amounts within parentheses.

ORS would like to emphasize that the Urquhart Plant (Combined Cycle) Fixed Capacity Charge monthly amount of \$ 673,417 is treated, per PSC Order No. 2003-38, on a retail basis as a reduction to the monthly Deferred Fuel Entries. The Jasper Plant (Combined Cycle) Fixed Capacity Charge monthly amount of \$910,167, prorated for January 2005, is also treated, per PSC Order No. 2005-2, on a retail basis as a reduction to the monthly Deferred Fuel Entries.

\*Explanation of Footnotes on Audit Exhibit JRC-7, Page 3 of 4 and Page 4 of 4.

Note: Prepared by the ORS Audit Staff.



South Carolina Electric & Gas Company  
Computation of Unbilled Revenue  
March 2003 – April 2005

**Explanation of Footnotes to Audit Exhibit JRC-7:**

- (1) The ORS Audit Staff's cumulative (under)-recovery balance brought forward from February 2004 of (\$20,532,261), as reflected on this exhibit, consists of two amounts. **The first amount**, which is **(\$15,099,348)**, is the amount of the cumulative (under)-recovery balance as of February 2004, as shown on the PSC "Commission Staff Report" (Audit Exhibit G-Page 2 of 4), from SCE&G's last fuel review period (actual March 2003 – February 2004), Docket No. 2004-2-E. During the Company's last S.C. Fuel Adjustment Clause hearing, the Company and the Consumer Advocate agreed upon a stipulation concerning two previous dockets' fuel costs. The PSC Audit Staff agreed with the stipulation and the Commission approved the stipulation. In order to reflect the agreement to the stipulation, the PSC Audit Staff agreed that the PSC Staff's carry-forward cumulative (under)-recovery difference from the Company of (\$5,432,913), from one of the previously contested dockets (Docket No. 2003-2-E), would be reconciled to the Company's actual February 2004 cumulative (under)-recovery balance. Therefore, **the second amount** is the carry-forward (under)-recovery Company vs. Staff difference of **(\$5,432,913)** added to Staff's original cumulative (under)-recovery balance as of February 2004 of (\$15,099,348). Both figures are from the last fuel hearing. The sum of the two aforementioned amounts reflects the amount at the beginning of this exhibit, **(\$20,532,261)**. This amount, which is the same amount shown by the Company as its beginning over (under)-recovery balance from February 2004 for this review period, also reflects the settlement of any previous fuel dockets.
- (2) In March, April, May, July, August, November and December 2004, the Company had true-ups due to various Company corrections and revisions to costs such as Fossil Fuel Costs, SO<sub>2</sub> Emissions Allowances and Purchased Power (Purchases and Sales) Costs. The amount applicable to the PSC-approved Stipulation of SCE&G and the Consumer Advocate, per the last fuel review period, of \$25,618,063 is reflected in the May 2004 true-up adjustments as a reduction to the Fuel Adjustment Clause.
- (3) For each month of the review period, the Urquhart Plant Fixed Capacity Gas Transportation Charge of \$673,417 is deducted, on a retail basis, from each monthly deferred fuel entry per PSC Order No. 2003-38. That PSC Order stated that these Fixed Gas Transportation Capacity Charges would be removed from the S.C. Fuel Adjustment Clause to allow recovery of these charges through base rates (per rate case), rather than through the clause. These charges are fixed monthly charges that do not vary with the consumption of natural gas. As stated in PSC Order No. 2003-38, these charges should "be included in base rates

**South Carolina Electric & Gas Company**  
**Computation of Unbilled Revenue**  
**March 2003 – April 2005**

**Explanation of Footnotes to Audit Exhibit JRC-7:**

**(3) (Continued)**

because of the fixed nature of the obligations.” As of January 2005, the Jasper Plant Fixed Capacity Charge monthly retail amount of \$910,167, prorated for January 2005, is also treated on a retail basis as a reduction to the monthly Deferred Fuel Entries, per PSC Order No. 2005-2 (the Company’s latest rate case order, effective January 6, 2005). Based on PSC Order No. 2005-2, as of January 6, 2005, the current review period’s fuel factor was reduced by \$0.00057/kwh to reflect the removal of the Jasper Plant’s Fixed Capacity Charge from the fuel clause calculations. Based on the same rationale as PSC Order No. 2003-38, the Jasper Plant Fixed Capacity Charges would be removed from the S.C. Fuel Adjustment Clause to allow recovery of these charges through base rates (per rate case), rather than through the clause. These charges are fixed monthly charges that do not vary with the consumption of natural gas. As stated in PSC Order No. 2005-2, these charges should “be included in base rates because of the fixed nature of the obligations.” Therefore, in January 2005 two base fuel factors are reflected, the Old Base Fuel Factor (before PSC Order No. 2005-2) of \$0.01821 and the New Base Fuel Factor (as of PSC Order No. 2005-2, dated January 6, 2005) of \$0.01764 (\$0.01821 less \$0.00057). January 2005 Retail KWH Sales were prorated according to those Retail KWH Sales applicable to the Old Base Fuel Factor and to the New Base Fuel Factor. It was determined that 55% of the January 2005 Retail KWH Sales are applicable to the Old Base Fuel Factor and 45% are applicable to the New Base Fuel Factor. Using these prorated percentages, ORS Audit Staff and the Company then prorated the Fixed Capacity Charges of the Urquhart Plant and the Jasper Plant. In January 2005, under the Old Base Fuel Factor, the prorated amount for the Urquhart Plant was \$370,379 (\$673,417 x 55%). Under the New Base Fuel Factor, the prorated amount for the Urquhart Plant was \$303,038 (\$673,417 x 45%). The Jasper Plant prorated amount totaled \$409,575 (\$910,167 x 45%). The grand total for the Urquhart and Jasper Plants under the New Base Fuel Factor totaled \$712,613.

It should be noted that ORS’s cumulative (under)-recovery of fuel costs as of actual January 2005 totaled (\$23,979,198). The Company’s cumulative (under)-recovery total as of actual January 2005 totaled (\$24,190,208). The difference between the Company’s and ORS’s cumulative (under)-recovery as of actual January 2005 totals \$211,010. This difference is based on the Company originally using another methodology to prorate the Fixed Capacity Charges. However, the Company, in its testimony in Docket No. 2005-2-E {Exhibit No. – (JRH-1)}, reflects a true-up adjustment in estimated February 2005 of \$211,009, which reconciles within a \$2 rounding difference (\$1 from January 2005’s \$211,010 vs. \$211,009 difference; and \$1 from February 2005). The cumulative (under)-recovery balance as of estimated February 2005 of the Company totaled (\$26,631,736) and the ORS totaled (\$26,631,734).